



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: D-30 (I1 series) BYPASS RATIO: 0.9
 UNIQUE ID NUMBER: 1AA001 PRESSURE RATIO (π_{00}): 18.4
 COMBUSTOR: RATED THRUST (F_{00}) (kN): 66.6
 ENGINE TYPE: MTF

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	207.8	257.6	75.5	45.1
AS % OF ORIGINAL LIMIT	1060.0	218.3	98.3	170.3
AS % OF CAEP/2 LIMIT (NO _x)			122.8	
AS % OF CAEP/4 LIMIT (NO _x)			141.9	
AS % OF CAEP/6 LIMIT (NO _x)			152.8	
AS % OF CAEP/8 LIMIT (NO _x)			177.2	

DATA STATUS

- PRE-REGULATION
 - CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 x OTHER (SEE REMARKS)

EMISSIONS STATUS

- DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	1.150	0.12	2.70	19.10	33.0
CLIMB OUT	85	2.2	0.975	0.14	3.20	16.30	35.0
APPROACH	30	4.0	0.350	1.50	14.50	7.00	27.0
IDLE	7	26.0	0.130	43.60	60.30	3.60	8.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			464	8992	13989	4338	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				2	2	2	1
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				134.9	209.9	65.1	35.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	103
TEMPERATURE (K)	293
ABS HUMIDITY (kg/kg)	0.01048

FUEL

SPEC	TS-1
H/C	2
AROM (%)	19.3

MANUFACTURER: Aviadvigatel
 TEST ORGANIZATION: State Inst for Civ Aviation
 TEST LOCATION: Sheremetjevo, Moscow
 TEST DATES: 03/08/1990

REMARKS

- Data obtained on aircraft (Tu-134B)
- In-service engine(s), tested after overhaul

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)